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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/725,339

12/02/2003

Takaaki Matsubayashi

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7590 04/05/2007  
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EXAMINER

MAPLES, JOHN S

ART UNIT

PAPER NUMBER

1745

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/725,339

Applicant(s)

MATSUBAYASHI ET AL.

Examiner

John S. Maples

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1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 ~~is~~/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10, 11 and 15 ~~is~~/are rejected.
- 7) ☒ Claim(s) 8, 9, 12-14, 16, 17 ~~is~~/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

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1. The present specification is objected to because many words therein are incomplete. For example, page 1, line 27; page 2, lines 1-3, line 27; page 3, lines 1-3, line 27; page 4, lines 1-3, etc. The present application should be thoroughly and completely reviewed amended. Applicant is cautioned against the addition of new matter.

2. Claims 8, 9, 12-14, 16, 17 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 8, 9, 12-14, 16, 17 have not been further treated on the merits.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7, 10-11, 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 1-7, 10-11 and 15 require complete and thorough revision and amendment so that these claims comply with the above statute. There are many antecedent basis problems with the claims and many of the claims are incomplete because they include words that have missing letters-see claims 6, 7, 10, 15. Applicant should carefully and thoroughly review the claimed subject matter and also make sure the claims are grammatically correct. Upon revision, the claims may also require a restriction requirement because applicant is claiming both a fuel cell and a method of

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operating a fuel cell, however in view of the severe indefiniteness and problems with the claims, the different groups cannot be delineated at this time.

In claim 1, line 3, are the "reaction gas channels" the same as the "reaction gas channels" in lines 1-2 of claim 1 or are they different channels? The expression "outlet header" found in line 4 of claim 1 does not have proper antecedent basis.

In claim 2, it is not known what is encompassed by the expression "dew point of gas or greater" because it is not known what gas is being referenced?

Claim 3, line 2, "inlet header" does not find antecedent basis.

In claim 4, lines 2-3, the expression "the dew point of one side of reaction gas is set at the temperature of the other side of reaction gas" is unclear and requires amendment.

In claim 5, the expressions "one side of reaction gas" and "the other side of reaction gas" are unclear. Also, Applicant has claimed reaction gas channels or heat medium channels (underlining added). However, lines 2-3 set forth reaction gas while line 4 of claim 5 sets forth heat medium. Clarification is required because this claim cannot include both reaction gas and heat medium.

In claim 6, line last line is indefinite because of incomplete word(s).

Claim 7, line 1 is unclear because of the incomplete words.

Claim 10, line 1, includes incomplete word(s) and in line 2, there is no antecedent basis for "downstream area".

Claim 11, dependent on claim 10, falls therewith.

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Claim 15 includes multiple incomplete words and is thus unclear and indefinite.

Also, line 2, "heat medium" finds no proper antecedent basis.

5. In view of the above objections and rejections to the claims, it was not possible to determine the metes and bounds of applicant's claimed subject matter and so it was not possible to conduct a search to find prior art.

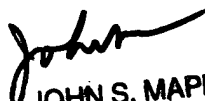
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Thursday, 6:15-3:45, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JSM/3-27-2007

  
JOHN S. MAPLES  
PRIMARY EXAMINER